Title (en)

Methods and systems for optimising immersion lithographic processing

Title (de)

Verfahren und Systeme zur Optimierung eines lithographischen Immersionsverfahrens

Title (fr)

Procédés et systèmes destinés à optimiser un processus lithographique d'immersion

Publication

**EP 1804121 A1 20070704 (EN)**

Application

**EP 05078032 A 20051229**

Priority

EP 05078032 A 20051229

Abstract (en)

A method (300) is described for setting up immersion lithographic processing of a device (102). The immersion lithographic processing typically is characterised by immersion lithographic processing parameters. The immersion lithographic processing of a device (102) typically comprises contacting said device (102) with an immersion liquid (114) characterised by soak time related parameters. The method for setting up comprises obtaining (302) a value for at least one soak time related parameter based on said immersion lithographic processing parameters, deriving (304) an image performance characteristic for said immersion lithographic processing, using a model for at least one image performance parameter characteristic for said image performance characteristic as function of said at least one soak time related parameter and evaluating (306) said derived image performance characteristic with respect to a predetermined image performance characteristic criterion. If the derived image performance characteristic does not fulfil the image performance characteristic criterion, adjusting (308) said immersion lithographic processing parameters based on the derived image performance characteristic.

IPC 8 full level

**G03F 7/20** (2006.01)

CPC (source: EP)

**G03F 7/70341** (2013.01); **G03F 7/705** (2013.01); **G03F 7/70533** (2013.01)

Citation (search report)
- [X] EP 1519231 A1 20050330 - ASML NETHERLANDS BV [NL]
- [X] US 2005248741 A1 20051110 - KAWAMURA DAISUKE [JP], et al
- [A] EP 0507589 A2 19921007 - NIPPON KOGAKU KK [JP]

Cited by

US10627721B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1804121 A1 20070704**

DOCDB simple family (application)

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